

ABSTRACT

A combination of poly urethane polymeric components provides desired characteristics in forming medical instruments such as catheters and balloons for dilatation catheters. For example, a balloon material is formed from a blend of urethane polymeric components, including a first polymeric component having a first glass transition temperature and a second polymeric component having a second glass transition temperature. The first polymeric component can be a branched or straight chain of thermoplastic polyurethane compound having a glass transition temperature higher than normal human body temperature. The second polymeric component can be a second thermoplastic polyurethane having a glass transition temperature equal to or lower than normal human body temperature. The polymeric blend can be heat treated to further enhance the properties or stability of the balloon material, including significantly increasing burst pressures.